

<p>ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH</p> <p>LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary)</p>	U.S. POSTAL NO. 10589-033-999	APPLICATION NO. 10/551,304
APPLICANT Trotta, C.		
FILING DATE May 18, 2006		ART UNIT 1639

U.S. PATENT DOCUMENTS

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	A11 5,994,124	11/30/99	Bozzoni	
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	A18 6,446,032	09/03/02	Schimmel	

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	B03 WO 02/83837	10/24/02	Almstead		
	B04 WO 02/83953	10/24/02	PTC Therapeutics, Inc.		
	B05 WO 91/09942	07/11/91	Board of Regents, The University of Texas System		
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B12	WO 04/087069	10/14/04	PTC Therapeutics, Inc.		
B13	WO 04/087070	10/14/04	PTC Therapeutics, Inc.		
B14	WO 04/087884	10/14/04	PTC Therapeutics, Inc.		
B15	DE 3436818	04/10/89	Hoechst AG	No Translation	
B16	CN 1228156	12/26/01	Wuhan Inst Of Virology, Chinese		
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	C21	LI et al., 1998, "Crystal structure and evolution of a transfer RNA splicing enzyme" Science 280(5361):279-284	
	C22	LYKKE-ANDERSEN, J. & GARRETT, R.A., 1997, "RNA-protein interactions of an archaeal homotetrameric splicing endoribonuclease with an exceptional evolutionary history." EMBO J 16(20):6290-6300.	
	C23	PHIZICKY et al., 1986, "Saccharomyces cerevisiae tRNA ligase. Purification of the protein and isolation of the structural gene" J. of Biol. Chem. 261(6):2978-2986	
	C24	QIN & PYLE, 1999, "Site-specific labeling of RNA with fluorophores and other structural probes." Methods 18 (1):60-70	
	C25	REYES & ABELSON 1988, "Substrate Recognition and Splice Site Determination in Yeast tRNA Splicing." Cell, 55:719-730	
	C26	SARKAR & HOPPER., 1998, "tRNA Nuclear Export in <i>Saccharomyces cerevisiae</i> : In Situ Hybridization Analysis." Mol. Biol. of the Cell, 9:3041-3055	
	C27	SAXENA et al., 1992, "Angiogenin is a Cytotoxic, tRNA-specific Ribonuclease in the RNase A Superfamily." J. of Biol. Chem. 267(30):21982-21986	
	C28	TROTTA et al., 1997, "The yeast tRNA splicing endonuclease: a tetrameric enzyme with two active site subunits homologous to the archaeal tRNA endonucleases." Cell 89:849-858.	
	C29	TROTTA, C.R. AND ABELSON, J.N., 1999, "tRNA Splicing: An RNA World Add-on or an Ancient Reaction? In RNA World II" Tom Cech, Ray Gesteland and John Atkins (eds.), Cold Spring Harbor Laboratory Press, 561-584	
	C30	TROTTA., 1999, "The Composition, Function and Evolution of the tRNA Splicing Endonuclease." Thesis, California Institute of Technology, pp.1-147	
	C31	TSIEN et al., 1993, "FRET for studying intracellular signaling." Trends in Cell. Bio. 3(7): 242-245	
	C32	VAUGHN et al., 2002, "Methionine In and Out of Proteins: Targets for Drug Design." Curr. Med. Chem. 9(3):385-409	
	C33	VOLAREVIC et al., 2000, "Proliferation, But not Growth Blocked by Conditional Deletion of 40S Ribosomal Protein S6." Science 288:2045-2047	
	C34	WANG et al., 1990, "Substrate Masking: Binding of RNA by EGTA-Inactivated Micrococcal Nuclease Results in Artificial Inhibition of RNA Processing Reactions." Nuc. Acids Res. 18(22):6625-6626	
	C35	WINTER et al., 2000, "RNA polymerase III transcription factor TFIIC2 is overexpressed in ovarian tumors." Proc. Natl. Acad. Sci., 97(23):12619-12624	
	C36	XU et al., 1990, "Purification of yeast transfer RNA ligase." Meth. in Enzymol. 181:463-471	
	C37	Yeast Accession No. M272726; SEQID: "http://www.yeastgenome.org"	

NYI-3914639v3

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C38	No date	Yeast Accession No: YAR008w; SEN34 "http://www.yeastgenome.org/"	
C39	No date	Yeast Accession No: YMR059w; SEN15 "http://www.yeastgenome.org/"	
C40	No date	Yeast Accession No: YPL083c; SEN54 "http://www.yeastgenome.org/"	
C41		ZHANG et al., 1997, "Gene Expression Profiles in Normal and Cancer Cells." Science 276:1268-1272	
C42		BALDI et al., 1992, "Participation of the intron in the reaction catalyzed by the <i>Xenopus</i> tRNA splicing endonuclease." Science 255:1404-1408.	
C43		BARBINO & KELLER, 1999, "Last but not least: regulated poly(A) tail formation." Cell 99(1):9-11	
C44		BUJNICKI, J.M., & RYCHLEWSKI, L., 2000, "Prediction of a common fold for all four subunits of the yeast tRNA splicing endonuclease: implications for the evolution of the EndA/Sen family." FEBS Lett 486: 328-329.	
C45		BUVOLI et al., 2000, "Suppression of nonsense mutations in cell culture and mice by multimerized suppressor tRNA genes" Molecular and Cellular Biology 20(9):3116-3124	
C46		CALVO, O., AND MANLEY, J.L., 2003, "Strange bedfellows: polyadenylation factors at the promoter." Genes Dev 17(11):1321-1327.	
C47		CHOI AND DREYFUSS, 1984, "Monoclonal antibody characterization of the C proteins of heterogeneous nuclear ribonucleoprotein complexes in vertebrate cells." J. Cell. Biol. 99(6):1997-2004	
C48		CULVER et al., 1997, "A 2'-phosphotransferase implicated in tRNA splicing is essential in <i>Saccharomyces cerevisiae</i> ." J Biol Chem 272:13203-13210.	
C49		DE VRIES, H. et al., 2000, "Human pre-mRNA cleavage factor II(m) contains homologs of yeast proteins and bridges two other cleavage factors." EMBO J 19:5895-5904.	
C50		FABBRI, S et al., 1998, "Conservation of substrate recognition mechanisms by tRNA splicing endonucleases." Science 280, 284-286.	
C51		FRANK & PACE, 1998, "Ribonuclease P: unity and diversity in a tRNA processing ribozyme." Annu Rev Biochem 67, 153-180.	
C52		GANDINI-ATTARDI, et al., 1990, "Transfer RNA splicing endonuclease from <i>Xenopus laevis</i> ." Methods Enzymol 181:510-517.	
C53		HIROSE AND MANLEY, 2000, "RNA polymerase II and the integration of nuclear events." Genes Dev., 14(12):1415-1429	
C54		HOPPER, A.K., AND PHIZICKY, E.M., 2003, "tRNA transfers to the limelight." Genes Dev 17(2):162-180.	
C55		HUH, et al., 2003, "Global analysis of protein localization in budding yeast." Nature 425:686-691.	
C56		JACOBSON et al., 1997, "Nuclear domains of the RNA subunit of RNase P." J Cell Sci. 110 (Pt 7):829-837.	
C57		LASKI, F.A. et al., 1983, "Characterization of tRNA precursor splicing in mammalian extracts." J Biol. Chem. 258(19):11974-11980.	
C58		MINVIELLE-SEBASTIA, L. & KELLER, W., 1999, "mRNA polyadenylation and its coupling to other RNA processing reactions and to transcription." Curr. Opin. Cell. Biol. 11:352-357	
C59		O'CONNOR, J.P., & PEEBLES, C.L., 1992, "PTA1, an essential gene of <i>Saccharomyces cerevisiae</i> affecting pre-tRNA processing." Mol Cell Biol 12:3843-3856.	
C60		OTSUKA, et al., 1981, "Ribonuclease 'XlaI' an activity from <i>Xenopus laevis</i> oocytes that excises intervening sequences from yeast transfer ribonucleic acid precursors." Mol Cell Biol 1:269-280.	
C61		PARK & BHANDARY, 1998, "Tetracycline-regulated suppression of amber codons in mammalian cells." Mol. & Cell. Biol. 18:4418-4425	
C62		PREKER et al., 1997, "A multisubunit 3'-end processing factor from yeast containing poly(A) polymerase and	

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		homologues of the subunits of mammalian cleavage and polyadenylation specificity factor." EMBO J 16:4727-4737.	
C63		PROUDFOOT, 2000, "Connecting transcription to messenger RNA processing." Trends Biochem Sci. 2000 Jun;25(6):290-3. Review.	
C64		RAUHUT et al., 1990, "Yeast tRNA-splicing endonuclease is a heterotrimeric enzyme." J Biol. Chem. 265(30):18180-18184.	
C65		REYES et al., 1987, "A synthetic substrate for tRNA splicing." Anal. Biochem. 166(1):90-106	
C66		STANDRING et al., 1981, "Yeast tRNA ³ Leu gene transcribed and spliced in a HeLa cell extract." Proc. Natl. Acad. Sci. USA 78(10):5963-5967.	
C67		TAKAGAKI et al., 2000, "Complex protein interactions within the human polyadenylation machinery identify a novel component." Mol. Cell. Biol. 20:1515-1525.	
C68		TAKAKU et al., 2003, "A candidate prostate cancer susceptibility gene encodes tRNA 3' processing endoribonuclease." Nucleic Acids Res 31(9):2272-2278.	
C69		WAHLE & RUEGSEGER, 1999, "3'-End processing of pre-mRNA in eukaryotes." FEMS Micro Rev., 23(3):277-295	
C70		WALLACE et al., 1999, "Two distinct forms of the 64,000 Mr protein of the cleavage stimulation factor are expressed in mouse male germ cells." Proc. Natl. Acad. Sci. 96(12):6763-6768	
C71		XIAO et al., 2002, "Eukaryotic ribonuclease P: a plurality of ribonucleoprotein enzymes." Annu Rev Biochem 71, 165-189.	
C72		YOSHIHISA et al., 2003, "Possibility of cytoplasmic pre-tRNA splicing: the yeast tRNA splicing endonuclease mainly localizes on the mitochondria." Mol Biol Cell 14(8):3266-3279.	
C73		ZHAO, 1999 "Formation of mRNA 3' ends in eukaryotes: mechanism, regulation, and interrelationships with other steps in mRNA synthesis." Microbiol. Mol. Biol. Rev. 63:405-445	
C74		MIAO et al., 1993, "Yeast tRNA-splicing endonuclease cleaves precursor tRNA in a random pathway," J. Biol. Chem. 268(1):672-7	

NYI-3914639v3

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	C22	LYKKE-ANDERSEN, J. & GARRETT, R.A., 1997, "RNA-protein interactions of an archaeal homotetrameric splicing endoribonuclease with an exceptional evolutionary history." EMBO J 16(20):6290-6300.	
	C23	PHIZICKY et al., 1986, "Saccharomyces cerevisiae tRNA ligase. Purification of the protein and isolation of the structural gene" J. of Biol. Chem. 261(6):2978-2986	
	C24	QIN & PYLE, 1999, "Site-specific labeling of RNA with fluorophores and other structural probes." Methods 18 (1):60-70	
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	C26	SARKAR & HOPPER., 1998, "tRNA Nuclear Export in <i>Saccharomyces cerevisiae</i> : In Situ Hybridization Analysis." Mol. Biol. of the Cell., 9:3041-3055	
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	C32	VAUGHN et al., 2002, "Methionine In and Out of Proteins: Targets for Drug Design." Curr. Med. Chem. 9(3):385-409	
	C33	VOLAREVIC et al., 2000, "Proliferation, But not Growth Blocked by Conditional Deletion of 40S Ribosomal Protein S6." Science 288:2045-2047	
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	C36	XU et al., 1990, "Purification of yeast transfer RNA ligase." Meth. in Enzymol. 181:463-471	
	C37	Yeast Accession No: M32336; SEQ2: "http://www.yeastgenome.org/"	

NY1-39146393v

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NON PATENT LITERATURE DOCUMENTS

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C38	Yeast Accession No: YAR008w; SEN34 "http://www.yeastgenome.org/"	
C39	Yeast Accession No: YMR059w; SEN15 "http://www.yeastgenome.org/"	
C40	Yeast Accession No: YPL083c; SEN54 "http://www.yeastgenome.org/"	
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C42	BALDI et al., 1992, "Participation of the intron in the reaction catalyzed by the <i>Xenopus</i> tRNA splicing endonuclease." Science 255:1404-1408.	
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NYI-39146393

EXAMINER

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		homologues of the subunits of mammalian cleavage and polyadenylation specificity factor." EMBO J 16:4727-4737.	
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C65		REYES et al., 1987, "A synthetic substrate for tRNA splicing." Anal. Biochem. 166(1):90-106	
C66		STANDRING et al., 1981, "Yeast tRNA3Leu gene transcribed and spliced in a HeLa cell extract." Proc. Natl. Acad. Sci. USA 78(10):5963-5967.	
C67		TAKAGAKI et al., 2000, "Complex protein interactions within the human polyadenylation machinery identify a novel component." Mol. Cell. Biol. 20:1515-1525.	
C68		TAKAKU et al., 2003, "A candidate prostate cancer susceptibility gene encodes tRNA 3' processing endoribonuclease." Nucleic Acids Res 31(9):2272-2278.	
C69		WAHLE & RUEGSEGG, 1999, "3'-End processing of pre-mRNA in eukaryotes." FEMS Micro Rev., 23(3):277-295	
C70		WALLACE et al., 1999, "Two distinct forms of the 64,000 Mr protein of the cleavage stimulation factor are expressed in mouse male germ cells." Proc. Natl. Acad. Sci. 96(12):6763-6768	
C71		XIAO et al., 2002, "Eukaryotic ribonuclease P: a plurality of ribonucleoprotein enzymes." Annu Rev Biochem 71, 165-189.	
C72		YOSHIHISA et al., 2003, "Possibility of cytoplasmic pre-tRNA splicing: the yeast tRNA splicing endonuclease mainly localizes on the mitochondria." Mol Biol Cell 14(8):3266-3279.	
C73		ZHAO, 1999 "Formation of mRNA 3' ends in eukaryotes: mechanism, regulation, and interrelationships with other steps in mRNA synthesis." Microbiol. Mol. Biol. Rev. 63:405-445	
C74		MIAO et al., 1993, "Yeast tRNA-splicing endonuclease cleaves precursor tRNA in a random pathway." J. Biol. Chem. 268(1):672-7	

NYI-3914639v3

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U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	PAGES, COLUMNS, LINES, WHERE RELEVANT PASSAGES OR RELEVANT FIGURES APPEAR
	A01	2007/0020630	01/25/07	Trotta C.	
	A02	4,987,071	01/22/91	Cech et al.	
	A03	5,093,246	03/03/92	Cech et al.	
	A04	5,310,664	05/10/94	Butow et al.	
	A05	5,354,855	10/11/94	Cech et al.	
	A06	5,439,797	08/08/95	Tsien et al.	
	A07	5,591,610	01/07/97	Cech et al.	
	A08	5,726,195	03/10/98	Hill et al.	
	A09	5,776,738	07/07/98	Dell'Orco Sr.	
	A10	5,939,288	08/17/99	Thornburg	
	A11	5,994,124	11/30/99	Bozzoni	
	A12	6,025,167	02/15/00	Cech et al.	
	A13	6,180,399	01/30/01	Cech et al.	
	A14	6,214,563	04/10/01	Negulescu et al.	
	A15	6,221,587	04/27/01	Ecker et al.	
	A16	6,221,612	04/24/01	Knapp et al.	
	A17	6,232,070	05/05/01	Shuman	
	A18	6,446,032	09/03/02	Schimmel	

FOREIGN PATENT DOCUMENTS

	FOREIGN PATENT DOCUMENT COUNTRY CODE, NUMBER, KIND CODE (IF KNOWN)	DATE	NAME	PAGES, COLUMNS, LINES, WHERE RELEVANT PASSAGES OR RELEVANT FIGURES APPEAR	T
	B01	WO 01/25486	04/12/01	University of Medicine and Dentistry of New Jersey	
	B02	WO 01/92463	12/06/01	Istituto di biologia Cellulare, CNR	
	B03	WO 02/83837	10/24/02	Almstead	
	B04	WO 02/83953	10/24/02	PTC Therapeutics, Inc.	
	B05	WO 91/09942	07/11/91	Board of Regents, The University of Texas System	
	B06	WO 98/49274	11/05/98	Appligene-Oncor	
	B07	WO 99/20795	04/29/99	Melica HB	

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B08	WO 01/12820	02/22/01	Health Research Institute		
B09	WO 02/040685	05/23/02	Coriell Research Foundations, Inc.		
B10	WO 02/42326	05/30/02	Biota Scientific Management Pty LTD		
B11	WO 04/001010	12/31/03	PTC Therapeutics, Inc.		
B12	WO 04/087069	10/14/04	PTC Therapeutics, Inc.		
B13	WO 04/087070	10/14/04	PTC Therapeutics, Inc.		
B14	WO 04/087884	10/14/04	PTC Therapeutics, Inc.		
B15	DE 3426818	04/10/89	Hoechst AG		
B16	CN 1328156	12/26/01	Wuhan Inst Of Virology Chinese		
B17	WO 00/67580	11/16/06	SmithKline Beecham Corp.		

NON PATENT LITERATURE DOCUMENTS

Examiner Initials	(Include name of the author (in CAPITAL LETTERS), Title, Date, Pertinent Pages, Etc.)	T
C01	ABELSON et al., 1998, "tRNA splicing." Journal of Biological Chemistry 273(21):12685-12688	
C02	ADAMS et al., 1991, "Fluorescence ratio imaging of cyclic AMP in single cells." Nature 349:694-697	
C03	BELFORD et al., 1993, "Multiple nucleotide cofactor use by yeast ligase in tRNA splicing. Evidence for independent ATP- and GTP-binding sites" J. Biol. Chem. 268(4):2444-2450	
C04	BELFORT, M., & WEINER, A., 1997, "Another bridge between kingdoms: tRNA splicing in archaea and eukaryotes." Cell 89(7):1003-1006.	
C05	BJORK, G., 1995, "Biosynthesis and Function of Modified Nucleosides, in tRNA: Structure, Biosynthesis and Function." D. Soll & U. RajBhandary (eds.), American Society for Microbiology, Washington DC: pp. 165-205	
C06	DEUTSCHER, M.P., 1995 "tRNA Processing Nucleases, in tRNA: Structure, Biosynthesis and Function." D. Soll and U. RajBhandary (eds.), American Society for Microbiology, Washington DC: pp. 51-65	
C07	DIENER & MOORE, 1998, "Solution Structure of a Substrate for the Archaeal Pre-tRNA Splicing Endonucleases: The Bulge-Helix-Bulge Motif." Mol. Cell. 1:883-894	
C08	FRUSCOLONI et al., 2001, "Cleavage of non-tRNA substrates by eukaryal tRNA splicing endonucleases." EMBO Rep 2(3):217-221	
C09	GENBANK: Accession No: NP_079541; "tRNA splicing endonuclease 2 homolog [Homo sapiens]"	
C10	GENBANK: Accession No: NT_005927.12; "Homo sapiens chromosome 3 reference genomic contig"	
C11	GENBANK: Accession No: NT_011225.9; "Homo sapiens chromosome 19 reference genomic contig."	
C12	GENBANK: Accession No: XP_085899; "similar to LENG5 protein [Homo sapiens]."	
C13	GOMES et al., 1997, "RNA splicing ligase activity in the archaeon Haloferax volcanii" Biochem & Biophys. Res. Comm. 237:588-94	
C14	GREER et al., 1982, "Mechanism of action of a yeast RNA ligase in tRNA splicing" Cell 32:537-546	

NYI-3914639v3

EXAMINER

DATE CONSIDERED

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NON PATENT LITERATURE DOCUMENTS

Examiner Initials		(Include name of the author (in CAPITAL LETTERS), Title, Date, Pertinent Pages, Etc.)	T
	C15	GREER, 1986, "Assembly of tRNA Splicing Complex: Evidence for Concerted Excision and Joining Steps in Splicing <i>In Vitro</i> ." Mol. and Cellular. Bio., 6(2):638-642	
	C16	HYDE-DERUYSCHEER et al., 2000, "Detection of Small-Molecule Enzyme Inhibitors with Peptides Isolated from Phage-Displayed Combinatorial Peptide Libraries." Chem. & Biol. 7:17-25	
	C17	IKEMURA, 1985, "Codon Usage and tRNA Content in Unicellular and Multicellular Organisms." Mol. Biol. Evol., 2(1):13-34	
	C18	IKEMURA, T. AND OKEKI, H., 1983, "Codon usage and transfer RNA contents: organism-specific codon-choice patterns in reference to the isoacceptor contents." Cold Spring Harbor Symp. Quant. Biol. 47:1087-1097	
	C19	KLEMAN-LEYER et al., 1997, "Properties of H. volcani tRNA Intron Endonuclease Reveal a Relationship between the Archaeal and Eucaryal tRNA Intron Processing Systems." Cell., 89:839-847	
	C20	LI & ABELSON, 2000, "Crystal Structure of a Dimeric Archaeal Splicing Endonuclease." J. Mol. Biol. 302:639-648.	
	C21	LI et al., 1998, "Crystal structure and evolution of a transfer RNA splicing enzyme" Science 280(5361):279-284	
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	C27	SAXENA et al., 1992, "Angiogenin is a Cytotoxic, tRNA-specific Ribonuclease in the RNase A Superfamily." J. of Biol. Chem. 267(30):21982-21986	
	C28	TROTTA et al., 1997, "The yeast tRNA splicing endonuclease: a tetrameric enzyme with two active site subunits homologous to the archaeal tRNA endonucleases." Cell 89:849-858.	
	C29	TROTTA, C.R. AND ABELSON, J.N., 1999, "tRNA Splicing: An RNA World Add-On or an Ancient Reaction? In RNA World II" Tom Cech, Ray Gesteland and John Atkins (eds.), Cold Spring Harbor Laboratory Press, 561-584	
	C30	TROTTA, 1999, "The Composition, Function and Evolution of the tRNA Splicing Endonuclease." Thesis, California Institute of Technology, pp.1-147	
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	C32	VAUGHN et al., 2002, "Methionine In and Out of Proteins: Targets for Drug Design." Curr. Med. Chem. 9(3):385-409	
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	C64	RAUHUT et al., 1990, "Yeast tRNA-splicing endonuclease is a heterotrimeric enzyme." J Biol. Chem. 265(30):18180-18184.	
	C65	REYES et al., 1987, "A synthetic substrate for tRNA splicing." Anal. Biochem. 166(1):90-106	
	C66	STANDRING et al., 1981, "Yeast tRNA3Leu gene transcribed and spliced in a HeLa cell extract." Proc. Natl. Acad. Sci. USA 78(10):5963-5967.	
	C67	TAKAGAKI et al., 2000, "Complex protein interactions within the human polyadenylation machinery identify a novel component." Mol. Cell. Biol. 20:1515-1525.	
	C68	TAKAKU et al., 2003, "A candidate prostate cancer susceptibility gene encodes tRNA 3' processing endoribonuclease." Nucleic Acids Res 31(9):2272-2278.	
	C69	WAHLE & RUEGSEGG, 1999, "3'-End processing of pre-mRNA in eukaryotes." FEMS Micro Rev., 23(3):277-295	
	C70	WALLACE et al., 1999, "Two distinct forms of the 64,000 Mr protein of the cleavage stimulation factor are expressed in mouse male germ cells." Proc. Natl. Acad. Sci. 96(12):6763-6768	
	C71	XIAO et al., 2002, "Eukaryotic ribonuclease P: a plurality of ribonucleoprotein enzymes." Annu Rev Biochem 71, 165-189.	
	C72	YOSHIIHISA et al., 2003, "Possibility of cytoplasmic pre-tRNA splicing: the yeast tRNA splicing endonuclease mainly localizes on the mitochondria." Mol Biol Cell 14(8):3266-3279.	
	C73	ZHAO, 1999 "Formation of mRNA 3' ends in eukaryotes: mechanism, regulation, and interrelationships with other steps in mRNA synthesis." Microbiol. Mol. Biol. Rev. 63:405-445	
	C74	MIAO et al., 1993, "Yeast tRNA-splicing endonuclease cleaves precursor tRNA in a random pathway." J. Biol. Chem. 268(1):672-7	

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